

Response under 37 C.F.R. § 1.116
Serial No. 09/518,753
Page 2

RECEIVED
CENTRAL FAX CENTER
MAR 13 2007

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (Currently Amended) A method for transmitting a packet of data from a first computing system to a second computing system, the first computing system and the second computing system being included in a client/server object-based computing system, wherein the first computing system is a server and the second computing system is a client, the method comprising:

identifying the packet of data using the first computing system, wherein said second computing system is listening, wherein the packet of data includes data which represents an object in the client/server object-based computing system, the object being identified as an object for which the second computing system has an interest in receiving updates, the object including data and functionality;

attempting to send the packet of data from the first computing system to the second computing system;

determining when the packet of data is received by the second computing system; ~~and~~

sending an acknowledgment from the second computing system to the first computing system when it is determined that the packet of data is received by the second computing system, the acknowledgement being arranged to indicate that the packet of data is received by the second computing system; and

re-attempting at least once to send the packet of data from the first computing system to the second computing system when it is determined that the packet of data is not received by the second computing system, wherein a time differential between each re-attempt is determined using statistical information including at least one measurement of an amount of time elapsed for another packet of data to be sent and received.

2. (Cancelled)

Response under 37 C.F.R. § 1.116
Serial No. 09/518,753
Page 3

3. (Currently Amended) A method as recited in claim [[2]] 1 wherein re-attempting to send the packet of data does not include attempting to establish communications between the first computing system and the second computing system.

4. (Currently Amended) A method as recited in claim [[2]] 1 further including determining when the re-attempt to send the packet of data is successful, wherein when it is determined that the re-attempt to send the packet of data is not successful, an attempt is made to establish communications between the first computing system and the second computing system.

5. (Original) A method as recited in claim 1 further including establishing a connection between the first computing system and the second computing system before identifying the packet of data, the connection being a wireless connection.

6. (Original) A method as recited in claim 1 wherein attempting to send the packet of data from the first computing system to the second computing system includes:

placing the packet of data in a queue using the first computing system, the queue being arranged to prioritize the packet of data with respect to any packets of data associated with the queue; and

removing the packet of data from the queue using the second computing system.

7. - 8. (Canceled)

9. (Currently Amended) A method for transmitting a packet of data from a first computing system to a second computing system, the first computing system and the second computing system being included in a client/server object-based computing system, wherein the first computing system is a server and the second computing system is a client, the method comprising:

a) attempting to send the packet of data from the first computing system to the second computing system, wherein said second computing system is listening, wherein the packet of data includes data which represents an object in the client/server object-based computing system, the object being identified as an object for which the second

Response under 37 C.F.R. § 1.116
Serial No. 09/518,753
Page 4

computing system has an interest in receiving updates, the object including data and functionality;

b) determining when the packet of data is received by the second computing system;

c) identifying the packet of data as being successfully sent when it is determined that the packet of data is received by the second computing system; and

d) assuming that packet losses have occurred when it is determined that the packet of data is not received by the second computing system, wherein assuming that packet losses have occurred includes repeating a) and b) for up to a predetermined maximum number of times, wherein a time differential between each attempt at repeating a) and b) is determined using statistical information including at least one measurement of an amount of time elapsed for another packet of data to be sent and received.

10. (Original) A method as recited in claim 9 wherein assuming that packet losses have occurred includes repeating a) and b) until it is determined that the packet of data is successfully sent.

11. (Cancelled)

12. (Original) A method as recited in claim 9 wherein when a) and b) have been repeated a predetermined number of times, at least one attempt is made to establish a connection between the first computing system and the second computing system.

13. (Original) A method as recited in claim 12 further including determining when the at least one attempt to establish the connection between the first computing system and the second computing system is successful, wherein when it is determined that the at least one attempt to establish the connection is successful, a) and b) are repeated.

14. (Currently Amended) A computer program product for transmitting a packet of data from a first computing system to a second computing system, the first computing system and the second computing system being included in a client/server object-based

Response under 37 C.F.R. § 1.116
Serial No. 09/518,753
Page 5

computing system, wherein the first computing system is a server and the second computing system is a client, the computer program product comprising:

computer code for identifying the packet of data using the first computing system, wherein said second computing system is listening, wherein the packet of data includes data which represents an object in the client/server object-based computing system, the object being identified as an object for which the second computing system has an interest in receiving updates, the object including data and functionality;

computer code for attempting to send the packet of data from the first computing system to the second computing system;

computer code for determining when the packet of data is received by the second computing system;

computer code for sending an acknowledgment from the second computing system to the first computing system when it is determined that the packet of data is received by the second computing system, the acknowledgement being arranged to indicate that the packet of data is received by the second computing system;

computer code for re-attempting at least once to send the packet of data from the first computing system to the second computing system when it is determined that the packet of data is not received by the second computing system, wherein a time differential between each re-attempt is determined using statistical information including at least one measurement of an amount of time elapsed for another packet of data to be sent and received; and

a computer readable medium that stores the computer codes.

15. (Cancelled)

16. (Currently Amended) A computer program product as recited in claim [[15]] 14 wherein computer code for re-attempting to send the packet of data does not include computer code for attempting to establish communications between the first computing system and the second computing system.

17. (Currently Amended) A computer program product as recited in claim [[15]] 14 further including computer code for determining when the re-attempt to send the packet

Response under 37 C.F.R. § 1.116
Serial No. 09/518,753
Page 6

of data is successful, wherein when it is determined that the re-attempt to send the packet of data is not successful, an attempt is made to establish communications between the first computing system and the second computing system.

18. (Currently Amended) A computer program product for transmitting a packet of data from a first computing system to a second computing system, the first computing system and the second computing system being included in a client/server object-based computing system, wherein the first computing system is a server and the second computing system is a client, the computer program product comprising:

computer code for attempting to send the packet of data from the first computing system to the second computing system, wherein said second computing system is listening, wherein the packet of data includes data which represents an object in the client/server object-based computing system, the object being identified as an object for which the second computing system has an interest in receiving updates, the object including data and functionality;

computer code for determining when the packet of data is received by the second computing system;

computer code for identifying the packet of data as being successfully sent when it is determined that the packet of data is received by the second computing system;

computer code for assuming that packet losses have occurred when it is determined that the packet of data is not received by the second computing system, wherein assuming that packet losses have occurred includes computer code for re-attempting to send the packet of data from the first computing system to the second computing system and computer code for determining when the re-attempt to send the packet of data is successful for up to a predetermined maximum number of times, wherein a time differential between each re-attempt is determined using statistical information including at least one measurement of an amount of time elapsed for another packet of data to be sent and received; and

a computer readable medium that stores the computer codes.

19. (Currently Amended) A computer program product as recited in claim 18 wherein computer code for assuming that packet losses have occurred includes computer code

Response under 37 C.F.R. § 1.116
Serial No. 09/518,753
Page 7

~~for re-attempting to send the packet of data from the first computing system to the second computing system and computer code for determining when the re-attempt to send the packet of data is successful.~~

20. (Original) A computer program product as recited in claim 18 further including computer code for initiating at least one attempt establish a connection between the first computing system and the second computing system when it is determined that the re-attempt to send the packet of data is unsuccessful.

21. - 33. (Cancelled)

34. (Currently Amended) A method for transmitting a packet of data from a first computing system to a second computing system, the first computing system and the second computing system being included in a client/server object-based computing system, wherein the first computing system is a server and the second computing system is a client, the method comprising:

identifying the packet of data using the first computing system, wherein said second computing system is listening, wherein the packet of data includes data which represents an object in the client/server object-based computing system, the object being represented in an object list in the first computing system, the object list arranged to include objects that are to be updated, and the object also being represented in a filter tree which is arranged to identify objects that the second computing system has an interest in, the object including data and functionality;

attempting to send the packet of data from the first computing system to the second computing system;

determining when the packet of data is received by the second computing system; and

sending an acknowledgment from the second computing system to the first computing system when it is determined that the packet of data is received by the second computing system, the acknowledgement being arranged to indicate that the packet of data is received by the second computing system; and

Response under 37 C.F.R. § 1.116

Serial No. 09/518,753

Page 8

re-attempting at least once to send the packet of data from the first computing system to the second computing system when it is determined that the packet of data is not received by the second computing system, wherein a time differential between each re-attempt is determined using statistical information including at least one measurement of an amount of time elapsed for another packet of data to be sent and received.